

REMARKS

Claim 58 is canceled herein. Claims 1-23, 34-55 and 62-68 were previously canceled. Claims 24-33 and 56, 57 and 59-61 are pending.

35 USC 112 Second Paragraph Rejection of Claims 24 and 58

Claims 24 and 58 are rejected under 35 USC second paragraph as allegedly being indefinite.

Claim 58 is canceled herein, mooting the rejection in that regard.

Claim 24 has been carefully reviewed and is amended herein to correct for the noted alleged lack of clarity. Applicants respectfully request that the rejection be withdrawn.

Claims 24, 27-33, 56-59 and 61 over Renouard and Balcerowski

In the Office Action, claims 24, 27-33, 56-59 and 61 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,161,123 to Renouard et al. ("Renouard") in view of U.S. Patent No. 6,101,545 to Balcerowski et al. ("Balcerowski"). The Applicants respectfully traverse the rejection.

Claim 58 is canceled herein, mooting the rejection in that regard.

Claims 24, 27-33, 56, 57, 59 and 61 recite, *inter alia*, discarding a duplicate message, in response to detection of the duplicate message with a transport layer of a modified User Datagram Protocol (UDP) connectionless transport protocol.

Conventional UDP is a protocol used for wireless communications. Conventional UDP provides for exchange of datagrams without acknowledgements or guaranteed delivery, or message duplication detection. Conventional UDP fails to provide such services at the protocol level to minimize overhead while maximizing the limited bandwidth typically available in wireless communication networks. However, in some applications the limitations associated with conventional UDP provide obstacles. In applications where duplicate message detection is needed, conventional UDP fails to provide the services needed.

The modified UDP transport protocol as claimed overcomes the shortcoming associated with conventional UDP, by providing for duplicate message detection. As discussed in the detail below, Renouard and Balcerowski, either alone or in combination, fail to disclose, teach or suggest a modified UDP transport protocol, modified to detect a duplicate message, as claimed.

The Examiner acknowledges that Renouard fails to teach duplicate message detection. (see Office Action, page 3) The reason Renouard fails to teach such features is that Renouard teaches a UDP+ protocol that provides "persistent session" functionality to UDP, with a connection being reestablished to complete a data transfer after a termination. (see Renouard, Abstract) Reestablishing a connection to complete a data transfer at best requires detection of a lost message, not detection of a duplicate message, as claimed. Renouard fails to teach or suggest a modified UDP transport protocol transport layer modified to detect a duplicate message, as claimed.

The Examiner relies on Balcerowski at col. 7, lines 39-50 to allegedly teach the acknowledged deficiency in Renouard.

Balcerowski teaches:

Timers are used in conjunction with acknowledgments to detect lost messages. Each message requiring an acknowledgment has a timer associated with it. Expiration of the timer is known as a time-out and is an indication that either communication has been disrupted or the message or its acknowledgment was lost. If the message was received but the acknowledgment was lost, re-sending the message would result in a duplicate message.

Sequence numbers allow detection of duplicate messages. Any message resent should use the same sequence number as the original message. Any message with a duplicate sequence number should be ignored. (*emphasis added*)

Balcerowski teaches use of sequence numbers to detect duplicate messages. Even Balcerowski acknowledges that UDP fails to check for duplicate datagrams. (see col. 7, lines 9-12) Balcerowski fails to teach or suggest detection of a duplicate message at the protocol level, as claimed.

Balcerowski fails to teach or suggest a **modified UDP transport protocol transport layer** that detects a duplicate message, as claimed.

Renouard and Balcerowski, either alone or in combination, fail to disclose, teach, or suggest discarding a duplicate message, in response to detection of the duplicate message with a transport layer of a modified User Datagram Protocol (UDP) connectionless transport protocol, as recited by claims 24, 27-33, 56, 57, 59 and 61.

Accordingly, for at least all the above reasons, claims 24, 27-33, 56, 57, 59 and 61 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 25, 26 and 60 over Renouard, Balcerowski and Butman

In the Office Action, claims 25, 26 and 60 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Renouard in view of Balcerowski, and further in view of U.S. Patent No. 6,026,430 to Butman et al. ("Butman"). The Applicants respectfully traverse the rejection.

Claims 25, 26 and 60 all depend from claim 24, and are patentable over the prior art of record for all the reasons that claim 24 is patentable.

Claims 25, 26 and 60 recite a method of specifying a server class for a physical messaging network server during a registration of the physical messaging network server.

Butman is relied on to teach registration. However, claim 25 recites a method of specifying a server class for a physical messaging network server during a registration of the physical messaging network server. Butman fails to mention recognition of a server class, much less teach or suggest a method of specifying a server class for a physical messaging network server during a registration of the physical messaging network server, as required by claims 25, 26 and 60.

Claims 25, 26 and 60 recite, *inter alia*, discarding a duplicate message, in response to detection of the duplicate message with a transport layer of a modified User Datagram Protocol (UDP) connectionless transport

protocol. As discussed above, Renouard and Balcerowski, either alone or in combination, fail to disclose, teach or suggest such features.

A thorough reading of Butman reveals that Butman fails to teach or suggest reliance on UDP, much less a modified UDP connectionless transport protocol modified to reject a detected duplicate message. Butman fails to teach or suggest discarding a duplicate message, in response to detection of the duplicate message with a transport layer of a modified User Datagram Protocol (UDP) transport protocol, as required by claims 25, 26 and 60.

Renouard, Balcerowski, and Butman, either alone or in combination, fail to disclose, teach, or suggest discarding a duplicate message, in response to detection of the duplicate message with a transport layer of a modified User Datagram Protocol (UDP) connectionless transport protocol, as recited by claims 25, 26 and 60.

Accordingly, for at least all the above reasons, claims 25, 26 and 60 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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